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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 05/26/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/537,849

Applicant(s)

SCOTT ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8 and 17.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 03, 2004 has been entered (refers to amendment after final filed on January 05, 2004).

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-12, 14-20 rejected under 35 U.S.C. 102(e) as being anticipated by Tamano et al. (herein after referred as a Tamano U.S. patent number of 6032157).

1. As per claim 1, “a method for georeferencing a raster map image, comprising: displaying a raster map and a georeferenced map; wherein the raster map and the georeferenced map are separate maps marking a first point on the raster map; identifying image coordinates associated

with the annotated point on the raster map; marking a first point on the georeferenced map; identifying geographic coordinates associated with the first point on the georeferenced map that correspond to the first point on the raster map; marking a second point on the raster map; identifying image coordinates associated with the second point on the raster map; marking a second point on the georeferenced map; and identifying geographic coordinates associated with the second point on the georeferenced map; determining a mathematical relationship between the image coordinates.” Tamano in figs. 3-5 illustrates the limitation of the claim language. Tamano in col. 2, lines 40-66 discloses that Image information linked with attribute information is hereinafter called first image (raster map) information, and image information which approximately positionally corresponds to the first image information is called second image (georeferenced map) information and is not linked to the attribute information. Specifically, an object contained in the second image information is used as a key, and the attribute information linked with the first image information is retrieved by inputting a correspondence between the second image information and the first image information via the key, i.e. by selecting an object in the second image information. Tamano in col. 8 lines 34-54 and also in figs. 10 and 11 illustrates it is possible to simultaneously choose a part in the first image information 1 and a part in the second image information 2 so that these parts can be linked to each other, an efficient retrieval is realized. Figs. 11(a) through 11(e) corresponds to figs. 10(a) through 10(e), respectively.

2. As per claim 2, “the method of claim 1, further comprising: using the mathematical relationship to determine the geographic coordinates of at least one feature on the raster map”, the step is inherent because Tamano in figs. 3-5 illustrates the step.

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1. As per claim 3, “the method of claim 1, further comprising: storing the mathematical relationship with the raster map”, Tamano in fig. 6 illustrates the step.
2. As per claim 4, “the method of claim 1, further comprising: manipulating the raster map to display a location on the raster map; and updating the display of the georeferenced map to display a location identical to the location displayed on the raster map”, See rejection of claim 1.
3. As per claim 6, “the raster map and the georeferenced map are displayed on the same computer display”, Tamano in figs. 1 and 2 illustrates the step.
4. As per claim 7, “the corresponding points are marked by a user after visually determining geographically corresponding points”, Tamano in fig. 5 points 40 and 41 and also see in fig. 8 step 2130.
5. As per claim 8, “the method of claim 1, wherein the mathematical relationship is represented by a set of general linear functions”, Tamano invention is involved a two dimensional coordinates and also having a response (output) that is directly proportional to the input. These are considered as general linear function.
6. As per claim 9, “an apparatus for georeferencing a raster map image, comprising: means for displaying a raster map and a georeferenced map; wherein the raster map and the georeferenced map are separate maps; mean for marking a first point on the raster map; mean for identifying image coordinates associated with the first point on the raster map; mean for marking a first point on the georeferenced map; mean for identifying geographic coordinates associated with the annotated point on the georeferenced map that correspond to the first point on the raster map; mean for marking a second point on the raster map; identifying image coordinates associated with the second point on the raster map; marking a second point on the georeferenced

map; and identifying geographic coordinates associated with the second point on the georeferenced map; mean for determining a mathematical relationship between the image coordinates”. See rejection of claim 1.

7. As per claim 10, “the apparatus of claim 9, further comprising: means for using the mathematical relationship to determine the geographic coordinates of at least one feature on the raster map”, See rejection of claim 2.

8. As per claim 11, “the system of claim 9, further comprising: means for storing the mathematical relationship with the raster map”, see rejection of claim 3.

9. As per claim 12, “the apparatus of claim 9, further comprising: means for manipulating, the raster map to display a location on the raster map; and means for updating the display of the georeferenced map to display a location identical to the location displayed on the raster map”, see rejection of claim 4.

10. As per claim 14, “the apparatus of claim 9, wherein the raster map and the georeferenced map are displayed on the same computer display”, see rejection of claim 6.

11. As per claim 15, “the apparatus of claim 9, wherein the corresponding points are marked by a user after visually determining geographically corresponding points”, see rejection of claim 7.

12. As per claim 16, “the apparatus of claim 9, wherein the mathematical relationship is represented by a set of general linear functions”, see rejection of claim 8.

13. Claim 17, “The method of claim 1 further comprising identifying image coordinates associated with at least one point on the raster map; identifying geographic coordinates of points

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on the georeferenced map that correspond to the point identified on the raster map; and revising the mathematical relationship”, Tamano in figs. 3-5 illustrates the steps.

14. Claim 18, “The method of claim 17, wherein revising further comprises disregarding any points previously identified that are substantially inconsistent with the mathematical relationship”, See rejection of claim 17.

15. Claim 19, “The apparatus of claim 9 further comprising: means for identifying image coordinates associated with at least one point on the raster map; means for identifying geographic coordinates of points on the georeferenced map that correspond to the point identified on the raster map; and means for revising the mathematical relationship”, See rejection of claim 17.

16. Claim 20, “the apparatus of claim 19, wherein the means for revising further comprising means for disregarding any points previously identified that are substantially inconsistent with the mathematical relationship”, see rejection of claim 17.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Tamano, and further in view of Delorme et al (hereinafter referred as a Delorme U.S. patent number 5,848,373).

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17. As per claim 5, "the geographic coordinates are latitude and longitude", Tamano does not explicitly specify the latitude and longitude but, Delorme discloses in (col. 2, lines 25-35) The CAMLS system provides "intelligent" printed maps by direct computer output of computed mapping and travel location data on grid quadrangles for correlation with mapped surface features on the corresponding printed maps. This can be accomplished by human senses, e.g. visually and intuitively between human readable forms of the map without the necessity of mentally or quantitatively determining latitude and longitude and without requiring any mathematical calculations by the user. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Delorme into Tamano in order to incorporate the GPS technology (the geographic coordinates) that provides an improvement over a map information that increases the efficiency of linking objects displayed on an image map to descriptive data.

18. As per claim 13, "the apparatus of claim 9, wherein the geographic coordinates are latitude and longitude", See rejection of claim 5.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini


JEFFERY BRIEN
PRIMARY EXAMINER